

ABSTRACT

A distributed router and process dynamically managing forwarding information, with each routing node sharing its collected routing information in real time with the other routing nodes and managing forwarding information dynamically based on the routing information, thereby avoiding a need for packet forwarding in order to share the routing information between the routing nodes. The routing information is selectively updated in forwarding tables; thus efficiently managing the forwarding table of each routing node. Furthermore, the size of the forwarding table in each routing node may be reduced because the forwarding information of each routing node is managed in the form of a binary aggregation tree and the aggregation level of a delegation node that aggregates node information corresponding to routing information in the aggregation tree, may be variably set.